

WHAT IS CLAIMED IS:

1. An X-ray imaging apparatus comprising:
a sensor for converting radiation into an electric signal;
5 an electronic cassette for accommodating said sensor;
a first cable connected to a side surface of said electronic cassette; and
a first connector provided at an end of said
10 first cable.
2. An X-ray imaging apparatus comprising:
a sensor for converting radiation into an electric signal;
15 an electronic cassette for accommodating said sensor;
a first cable connected to a side surface of said electronic cassette; and
a first connector provided at an end of said
20 first cable;
a second connector to be connected to said first connector;
a second cable connected to said second connector; and
25 an external apparatus connected to said second cable for transmitting/receiving an electric signal to/from said electronic cassette and/or supplying

electric power to said cassette via said first and second cables.

3. An X-ray imaging apparatus according to
5 claim 1, wherein a length L of said first cable is determined based on the distance formulated by $L \geq W_p/2$ or $L \geq W_p/2 - X$, where X represents a distance from a center of the sensor to the side surface of said electronic cassette and W_p represents a shoulder
10 width or a maximum body width of a human body defined by Japanese Industrial Standards Z8500.

4. An X-ray imaging apparatus according to claim 2, wherein said electronic cassette is provided
15 with a connection control unit, said connection control unit generating, when it is not receiving an imaging signal, a disconnection signal indicating that disconnection of said connector is allowed or generating, when it is receiving an imaging signal, a
20 prohibition signal for prohibiting disconnection of said connector.

5. An x-ray imaging apparatus according to claim 4, wherein said electronic cassette is provided
25 with an indicator, said indicator emitting light of a specific color when it receives said disconnection signal or said prohibition signal.

6. An X-ray apparatus according to claim 2,
wherein said electronic cassette is provided with a
wireless communication unit capable of communicating
with said external apparatus, said wireless
5 communication unit being connectable to said first
connector.

7. An X-ray imaging apparatus according to
claim 6, wherein said electronic cassette is provided
10 with a battery for supplying electric power and a
control unit for controlling said wireless
communication unit and controlling power supply from
said battery, wherein when said wireless
communication unit is connected to said first
15 connector, said control unit controls to cause said
battery to supply electric power to said wireless
communication unit.

8. An X-ray imaging apparatus according to
20 claim 7, wherein when said wireless communication
unit receives an imaging start signal, said control
unit controls to cause said battery to supply
electric power to said sensor.